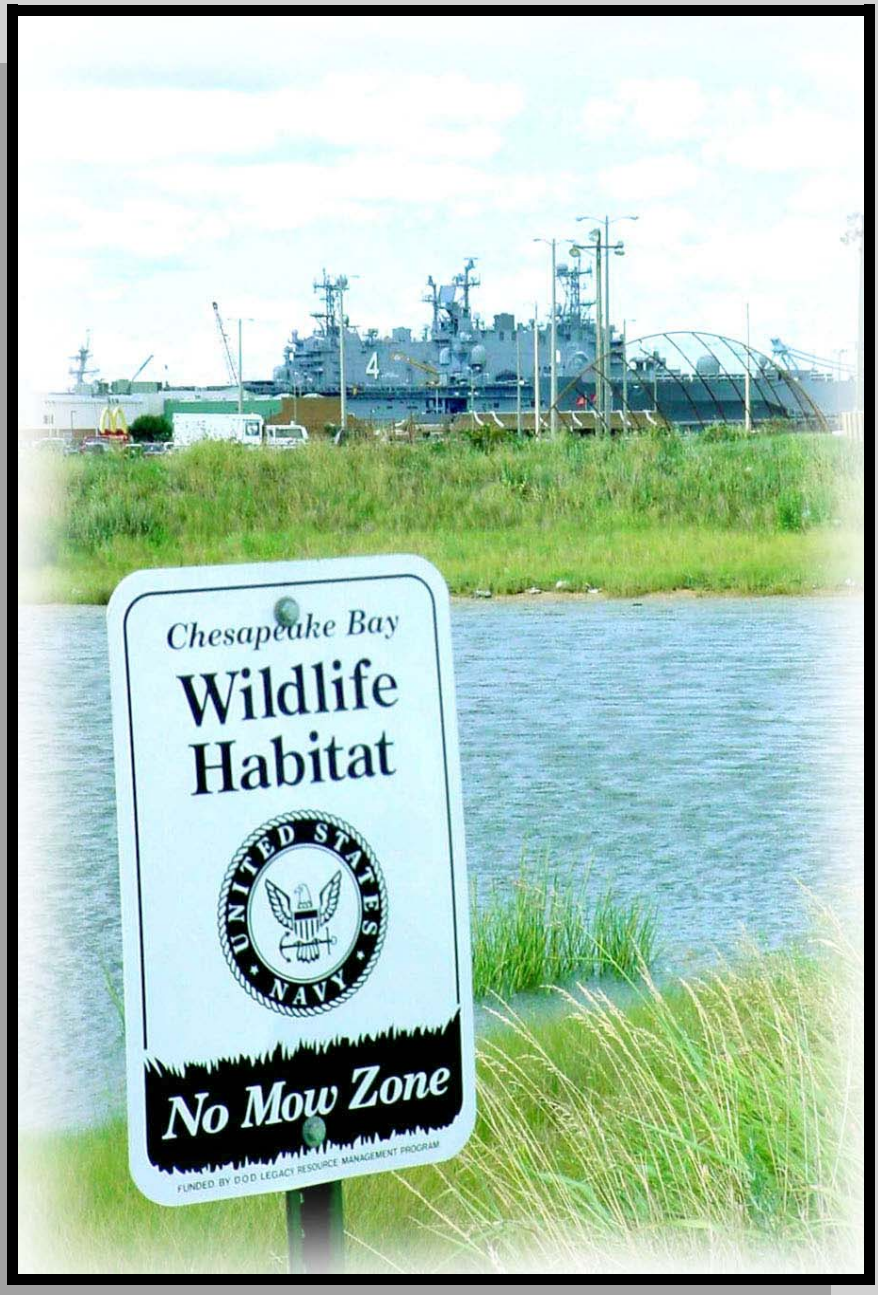
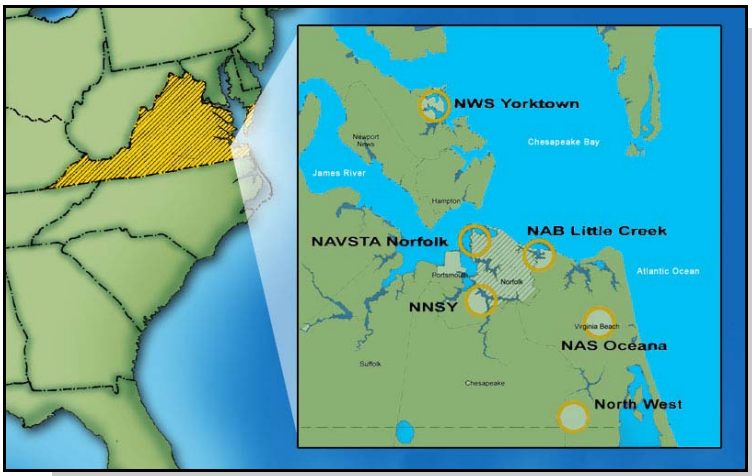
COMMANDER NAVY REGION MID-ATLANTIC

Secretary of Defense
FY2003 Environmental Security



ENVIRONMENTAL QUALITY

NON—INDUSTRIAL INSTALLATION



Major Installations in the Hampton Roads area

INTRODUCTION

The Commander, Navy Region Mid-Atlantic (CNRMA) operates thirteen installations and annexes in the Hampton Roads area, extending from Naval Weapons Station, Yorktown in the north to Naval Support Activity Norfolk Northwest Annex in the southeast. CNRMA is home to 109,000 military and civilian personnel. The region provides Base Operating Support (BOS) services to the largest concentration of shore commands and operational surface, air and submarine forces in the Navy, to include: 100 home-ported ships, 385 aircraft, and 295 tenant commands. The Region maintains three airfields, 49 piers, two fuel terminals, and 64 million square feet of facilities on 29,843 acres to meet the needs of the fleet in Hampton Roads.

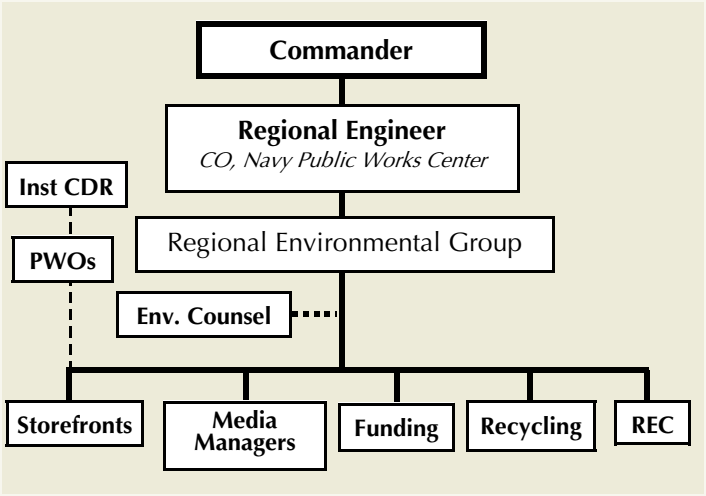
The Commanding Officer of Navy Public Works Center, Norfolk has been designated by CNRMA as the Regional Engineer (RE) with Regional Facilities and Environmental Program Manager responsibilities. The RE provides high-quality, consistent facilities and environmental services to those thirteen installations and annexes through a consolidated staff. Under the RE, the Regional Environmental Group (REG) provides daily environmental program management.

BACKGROUND AND PROGRAM SUMMARY

Environmental and natural resource protection is an ongoing, critical aspect of the CNRMA mission. Most of the thirteen installations are in the Chesapeake Bay watershed. The Chesapeake Bay is the object of a multi-state, multi-million dollar restoration effort and CNRMA has the lead in coordinating Department of Defense's (DOD) Bay restoration efforts. In addition to the bay restoration challenges, a myriad of permits with varied compliance requirements and the constant turnover of military personnel provide additional environmental management challenges for the region.

The Regional Environmental Group (REG) is structured with eight departments. Four of these departments known as "storefronts" have installation-specific responsibilities. These storefronts are "where the rubber meets the road" in resolving daily compliance issues. These departments, in the matrix organization depicted below, also report through the Public Works Officers to the Installation Commanders. The storefront staffs coordinate and carry out the day-to-day operations, including oversight, inspection and reporting, for the installations. The four other departments provide technical program management expertise, recycling and solid waste management, funding and administration support, and Navy/DoD Regional Environmental Coordination (REC). Each department is assigned one or more media managers who conduct region-wide technical program management for all installations. Media managers are key to the success of this regional organization; their responsibilities include policy, permits, budgets, and reporting. The Funding and Administration Department interfaces with the PWC Business Office and the CNRMA Comptroller to prepare POM and budget submittals and execute environmental funding.

This regional structure and strategy afford huge advantages over the former facility and installation management structure. One main advantage is standardization of policies, practices and procedures throughout the Mid Atlantic region. Programs, permits and plans are managed at the regional level, and carried out by respective media managers and storefront staffs; communication is vastly improved.



The Regional Engineer organization provides additional support to the environmental program; other key interfaces are maintained with the Commander, Fleet Forces Command, Public Works Center Utilities and Environmental Departments, the Fleet Industrial Supply Center (Logistics Program Manager and lead for hazardous materials management), Port Operations, Air Operations, and Support Services Program Managers and their staffs.

The Regional Environmental Group has also forged significant relationships with the community, many of which are detailed later in this document. The REC chairs a formal DOD partnership with the Virginia Department of Environmental Quality (VA DEQ); the partnership's mission has evolved beyond a pollution prevention focus to address all environmental issues that could impact an installation's sustainability. Other partnerships with the Elizabeth River Project and city environmental or clean community commissions allow the Navy to share expertise and develop joint goals with the community. Through its participation in Business for the Bay and Elizabeth River Project's River Stars Program, CNRMA mentors small businesses and demonstrates its environmental leadership.

As detailed in the following sections, CNRMA has effectively met its goals for the environmental program: to improve the efficiency of the overall operation and to reduce the compliance burdens on Navy sailors, while maintaining compliance, enhancing environmental quality, and supporting all mission requirements.

EMS IMPLEMENTATION

In February 2003, CNRMA established a quarterly Environmental Roundtable. This forum brings together the senior CNRMA leadership (all Installation Commanders, Program Managers, and installation Public Works Officers) and the environmental managers throughout the region for open discussions of environmental and mission sustainability concerns. During the first roundtable meeting, Rear Admiral Architzel (CNRMA), Installation Commanders, and Program Managers formally signed CNRMA's EMS Policy Statement. The CNRMA EMS Policy is an acknowledgement that environmental stewardship is essential to the safe, healthful, and compliant execution of our mission and the preservation and protection of our land, air, and water.

A phased program for EMS development and implementation is underway in this complex region, led by a team of media managers and storefront specialists. During the spring of 2003, routine compliance self-assessment meetings were initiated at the four regional storefronts to analyze reoccurring compliance findings and root causes. Problem solving exercises and brain storming sessions were held to identify corrective actions and support continuous process improvement. In addition to the self assessment meetings, the team has conducted environmental aspect inventories and prioritized ranking of aspects to set initial environmental objectives and targets. From these inventories and initial objectives, the team has completed 20 aspect/impact analyses of critical areas.

The EMS program manager has drafted a written EMS implementation plan based on a gap analysis; this is undergoing CNRMA review and approval. CNRMA tenants and activities whose missions may impact the environment are involved as stakeholders in the process. Point of Use compliance checklists and guides are in use for all environmental media and have significantly improved environmental quality and preservation of our mission real estate and natural resources.

Environmental awareness training as well as storm water and hazardous waste training is routinely offered to tenants with environmental impacts. Next steps are to include the Environmental Roundtable in EMS reviews and approval of environmental objectives and enhance community awareness of our EMS.

AIR POLLUTION CONTROL

The CNRMA environmental staff manages 22 separate air permits at 10 installations, including four Title V permits. Two of the installations are major sources of Hazardous Air Pollutants (HAPS) and have operations governed by the Aerospace National Emission Standards for Hazardous Air Pollutants (NESHAP), Shipbuilding/Ship Repair NESHAP, and the Wood Furniture Manufacturing NESHAP. These rigorous air emission standards contain strict material usage monitoring/recordkeeping and reporting requirements. Through the combined efforts of the operational forces and REG compliance staff, the air program has accomplished the following:

- Maintained full compliance with air permits and regulations at all installations during the award period.
- Developed and distributed standardized compliance procedures for owners/operators of air emission operations and units.
- Negotiated with Virginia Department of Environmental Quality (DEQ) to streamline existing permit requirements, remove unnecessary requirements, and ensure consistency throughout the region's Title V permits.
- Working to reduce sources of air pollution, including replacing exterior vented abrasive blasting glove boxes with interior vent units; solvent degreasing units with aqueous; and abrasive blast units with hydroblasting.

WATER POLLUTION CONTROL

The regional water program encompasses 19 Virginia Pollutant Discharge Elimination System (VPDES) permits; six sanitary sewer permits; 10 potable water permits; two groundwater withdrawal permits; and one Virginia Pollution Abatement Permit. The REG staff has negotiated consolidated permits which have reduced sampling and reporting requirements and lowered potential for violations.

A regional database has been developed to facilitate updating the Storm water Pollution Prevention Plans (SWPPP) for facilities in the region. The database allows the media manager to track inspections and site compliance evaluations, as well as prepare all SWPPP updates in-house at cost savings approaching $350K annually. In compliance with the VPDES Storm water Phase II regulations, the water program managers worked to develop a Regional Storm Water Management Plan and to apply for six VPDES General Permits for Small Municipal Separate Storm Sewer Systems. They were also successful in obtaining six permit waivers.

Multi-Functional OWS for AFFF containment and aircraft washing

To ensure compliance with regulations for drinking water quality, REG staff has:

- Standardized the region's 11 installation drinking water permits to improve regional compliance posture.
- Implemented Standard Operating Procedures (SOPs) to ensure all parties involved in monthly compliance monitoring are aware of the notification process when positive samples are detected.
- Completed the Annual Consumer Confidence Reports for all bases in house for cost savings of $88K annually. In addition, CNRMA now updates the Bacteriological Sampling Plan in-house for an annual cost savings of $77K.

During 2002, Virginia experienced a severe drought. REG staff worked closely with state agencies and other support staff to develop a CNRMA policy on water conservation. In December 2002, the Governor of Virginia established a technical advisory committee to provide recommendations on a drought response plan. The REC staff represented DOD on this committee.

The Water Program managers provide oversight management of 160 oil water separators, 20 silver recovery units, and numerous other pretreatment devices. To ensure the proper operation and management of these pretreatment devices, Pretreatment Device Management Plans and inspection checklists were developed for all bases in the region. As testimony to the success of the regional program, Naval Weapons Station Yorktown, Cheatham Annex and Dam Neck Annex received 2002 Pretreatment Excellence Awards from the Hampton Roads Sanitation District (HRSD), a local regulator.

Approximately 149 million gallons of fuel is stored in upgraded aboveground storage tanks throughout the region

Nearly 149 million gallons of petroleum products are stored in 684 aboveground storage tanks (ASTs) and 197 underground storage tanks (USTs) across the region. For the past two years, the environmental staff has focused on enhanced spill prevention by coordinating and executing regional pipeline pressure testing and API 653 tank inspection contracts. Leak detection upgrades to regulated USTs and upgrades and replacements of non-regulated USTs and ASTs have also been focus areas of the tank program. 117 tanks have been closed or replaced region-wide since 1999. At Cheatham Annex, approximately nine miles of underground piping was cleaned and permanently closed during the summer of 2002. The project resulted in the collection of over 97,000 gallons of oily waste.

During the last year, the region had one EPA UST inspection. No negative findings or NOVs were issued. The tank program has also implemented an EMS management strategy by conducting regular tank-custodian inspection training and standardizing inspection checklists. An integrated tank database has been developed to track all aspects of the Tank Program from the tank manufacturer to the closure date. The tank data are linked to other media data, such as air pollution sources. Thus, as the tank data are updated, so is the air pollution source information. Improvements to the database now allow the creation of Virginia AST and UST registration forms and Spill Prevention, Control, and Countermeasure (SPCC) plans. As tanks are installed or removed, the tank-specific SPCC forms are automatically generated for plan amendments.

The DoD Clean Water Act Services Steering Committee (CWASSC) is developing a SPCC Implementation Purple Guide following US EPA re-issuance of the Oil Pollution Prevention Rule in July 2002. Members of the SPCC Implementation team visited the region in September 2003 for a two-day tour and reviewed CNRMA's SPCC program. Following the plan reviews and site tours, the SPCC implementation team members commented they were "very impressed" with CNRMA's current SPCC plans and Navy was taking a "good technical approach" in implementing the SPCC regulations. Nine of the region's eleven SPCC plans are updated and maintained in-house.

Facility Response Plans for Naval Station Norfolk and Craney Island Fuel Terminal were updated over the last two years. In addition, Rapid Response Guides were developed for each base to provide a template for boom deployment in case of an oil spill. CNRMA has established and trained a Spill Management Team (SMT) to respond to large spills that exceed the capability of local base responders. A large SMT exercise was held in November 2002 at Craney Island. Participants included the Coast Guard, NOAA, and Virginia DEQ.

NOISE POLLUTION CONTROL

The cities of Virginia Beach, Norfolk, and Chesapeake have been encouraged by the Navy to adopt programs, policies, and regulations that promote compatible development near Naval air facilities in Hampton Roads. The Navy in 1999 published new Air Installations Compatible Use Zones (AICUZ) maps for Naval Air Station Oceana, Naval Auxiliary Landing Field Fentress, and Naval Station Norfolk Chambers Field. These maps were provided as a planning tool to local communities to discourage residential development in areas subject to high levels of aircraft noise. Through the Facilities Planning Group of the Regional Engineer, CNRMA reaches out to the local city planners to ensure military mission sustainability concerns are considered in the approval of private developments and city master plans.

RADIATION POLLUTION CONTROL

CNRMA relies on the technical experts at the Norfolk Naval Shipyard for handling and disposal of all radiological waste materials.

WASTE MANAGEMENT AND RESOURCE RECOVERY

Integrated Solid Waste Management Program

During 2003, all aspects of solid waste operations were aligned in an Integrated Solid Waste Management Program (ISWMP). The vision of the ISWMP is to cohesively engineer the waste stream for sustainable solutions. Significant innovations by the ISWMP include:

All recycled products in the region are collected in a "Single Stream" system by automated collection vehicles

- All solid waste generated by the Navy on the south side of Hampton Roads is disposed of through contract with the Southeastern Public Service Authority (SPSA). The all hands approach in diversion and recycling efforts has resulted in a "clean" waste stream and subsequent reduced disposal fee with SPSA.
- Continuous audit/adjustment by the ISWMP of collection services ensures an optimized pick up schedule for all waste streams on all levels. These measures have resulted in reduction in collection services and cost savings of approximately $200K.
- Automated collection and processing of recyclable materials has relaxed the sorting requirements for the generator. This approach has allowed us to increase our diversion rate and market materials that were previously cost prohibitive to recycle.
- As part of the ISWMP, the Regional QRP recycled 17,170 tons of material generating over $905K in revenue and over $3.3 million in disposal costs avoided. This resulted in a regional diversion rate of 34%.
- Through partnering with the Naval Supply Systems Command, wood waste in the form of pallets and shipping crates has been reduced by as much as 80% on some installations. The pallets are collected and returned to Fleet and Industrial Supply Center Norfolk (FISC) for ultimate re-issue to the fleet at no cost. Wood disposal contracts have been modified to reduce the level of service for an annual saving of $43K.

Toxic and Hazardous Waste

Hazardous and industrial waste disposal accounts for nearly 25% of the CNRMA environmental budget. CNRMA operates seven permitted HW storage facilities, 40 hazardous waste accumulation areas (HWAAs), and 180 satellite accumulation areas (SAAs). The region is working towards a goal of one permitted storage facility region-wide to reduce costs, oversight inspections, and long-term liability. Currently, three permitted facilities are undergoing closure.

A new partnership with FISC allows reuse of hazardous materials

To heighten compliance awareness and serve the various commands in the Mid-Atlantic Region, the Regional Environmental Group coordinated the development of ship offload procedures which were incorporated into a regional hazardous waste minimization and disposal guide.

This offload procedure became a focal point for a NAVFAC-sponsored pilot study. In addition, the REG made significant revisions to the regional hazardous waste minimization and disposal guide to increase user-friendliness. This guide, available on-line, is widely referred to by many tenants for their hazardous waste management and services questions. Major improvements include more detailed instructions for filling out the 1348 form for waste turn-ins; a revision of waste offload procedures, and inclusion of SOPs for satellite accumulation areas and hazardous waste accumulation areas.

The hazardous waste and pollution prevention media managers have focused on reducing the costs of hazardous waste disposal. CNRMA's aggressive Pollution Prevention (P2) program was recognized in 2002 with the Chief of Naval Operations' Environmental Award. Several examples of their minimization efforts are provided below:

- Equipped seven Morale, Welfare and Recreation auto hobby shops in the region with solvent free brake washers.
- Implemented replacement of over 250 lead acid batteries in the region with rechargeable gel-cells. This eliminates disposal of acid from associated processes.
- Introduced Natural Orange or other like non-solvent cleaning products in all 91 Aqueous Parts washers in the region.
- Replaced aluminum oxide blast units with six Plastic Bead Media Glove Box blast units at two Aircraft Intermediate Maintenance Depot facilities, thus reducing paint/media waste disposal.
- Issued stencil label makers at two locations to reduce aerosol can and stencil paper related waste. At one command, this has reduced aerosol can waste by 4500 cans annually.

The Mid-Atlantic Region continues to refine material management procedures to reduce costs and environmental impacts. The FISC supplies hazardous materials to work centers throughout the region utilizing the Consolidated Hazardous Material Reutilization and Inventory Management Program (CHRIMP). Hazardous materials are parceled out to the shops on an as needed basis, minimizing storage at the shops and the generation of expired shelf-life materials. Ship and shore customers can also return unused/unopened materials to the FISC reuse store; these materials are offered at no cost to other customers. This management policy will provide the Navy with financial savings by reducing hazardous waste and material procurement costs.

PEST MANAGEMENT

Pest control is currently performed by a mix of contractor and PWC personnel. CNRMA environmental staff have been working with Navy experts to develop a regional pest management plan, which defines a standard level of service for all thirteen installations in Hampton Roads. Pesticides applied by in-house personnel, as well as those applied by farmers on leased fields, are reported as required by DOD regulations. Standard policy is to use the least toxic pesticide that is effective in a particular application.

Environmental Service Recognition from VA. Beach Clean Community Commission

CNRMA published an instruction on Natural Resources Management for Fish and Wildlife, Feral Animals, Invasive Species, and Certain Pests in 2003. This provides guidance to commands in the region on how to handle nuisance animals while maintaining compliance with regulatory requirements.

ENVIRONMENTAL RESEARCH AND EDUCATION

Outreach is two-way communication between the Navy and the public to establish mutual understanding, promote involvement, and influence attitudes and actions, with the goal of improving joint stewardship of our natural resources. Within the mid-Atlantic region, over 1,000 sailors and civilians have volunteered more than 12,000 hours in the past two years in support of various environmental causes. In recognition of these efforts, the sailors and civilians from Naval Air Station Oceana, Naval Station Norfolk, and Dam Neck Annex won the Mid-Atlantic Region's award for Environmental Stewardship. CNRMA also won two awards from the City of Virginia Beach for exceptional contributions to Virginia Beach Clean Commission programs and the beauty and cleanliness of Virginia Beach. Nearly 2500 sailors and civilians from the region participated in the 2003 annual Clean the Bay Day, collecting over 23 tons of trash and debris from the installation shorelines and local beaches.

Naval Station Norfolk is a Model-Level River Star in an award-winning program developed by the Elizabeth River Project to encourage pollution prevention and habitat restoration among businesses and industry. Other annual community efforts with significant Navy participation include Earth Day–a jointly sponsored program with the cities of Norfolk and Virginia Beach. CNRMA continually promotes responsible environmental stewardship and actively engages local government and community-based organizations to advance Chesapeake Bay restoration goals and initiatives. As evidence of this commitment, CNRMA received the Chesapeake Bay Program Businesses for the Bay 2003 Outstanding Achievement Award for Federal Government for established regional partnerships and excellence in local P2 initiatives.

For Earth Day in 2002, in partnership with the Elizabeth River Project (ERP) and the local community, CNRMA organized a volunteer riparian plantings of approximately 1400 linear feet in the Paradise Creek sub-watershed at a former Navy Installation Restoration site in Portsmouth, Virginia. This project has been used as the springboard for similar efforts in the local area.

To strength the relationship between the state regulators, EPA and DOD installations, the CNRMA REC hosted the 2003 DOD/State/ EPA Region III Environmental Colloquium. The focus of this three-day conference was the integration of resources for environmental excellence. Over 350 people participated in the workshops, plenary and breakout sessions, which addressed topics ranging from EMS implementation to noise management to storm water Phase II compliance.

Rear Admiral Stephen Turcotte addresses attendees at EPA/DoD/State Region III Colloquium

The region supported a research partnership with Old Dominion University on the canebrake rattlesnake, a Virginia-listed endangered species, at Naval Support Activity, Northwest Annex. The research focused on the movement and behavior of the canebrake rattlesnake and entailed several years of data collection. These results can better help us to estimate the potential for proximity of the snakes with humans and their activities.

Chesapeake Bay Program

CNRMA is the designated DoD executive lead agent for implementation of the Chesapeake Bay Program (CBP) in the 6 state bay watershed. The CBP is a unique regional partnership that has led and directed the restoration of the Chesapeake Bay since the signing of the first historic Bay agreement in 1983. Priority areas for the Bay program are habitat, water quality, land use, and stewardship. Within the past two years, environmental staff has coordinated with the Virginia Marine Resources Commission (VMRC) in support of the CBP goals for restoration of the native oyster by evaluating potential reef sites on and adjacent to DoD installations. Environmental personnel have also taken an aggressive role in controlling invasive species which are causing or have the potential to cause significant negative impacts to the Bay's aquatic ecosystem. A comprehensive regional Environmental Assessment (EA) was completed for aerial application of herbicide to control two common invasive species, the common reed (Phragmites sp.) and kudzu. Regional Environmental personnel have participated in restoration of submerged aquatic vegetation (SAV) in the Hampton Roads area and have actively assisted the Virginia Institute of Marine Science (VIMS) in conducting aerial surveys of DoD properties to conduct annual surveys and mapping. As a water quality initiative, Navy personnel serve on Virginia's tributary strategy teams that are dedicated to reducing total nutrient and sediment loads to the Bay and its tributaries. Finally, CNRMA has sponsored regional Low Impact Development (LID) training and seminars promoting techniques designed to reduce the volume and toxicity of storm water runoff from Navy activities.

ENVIRONMENTAL COMPLIANCE ASSESSMENT AND MANAGEMENT PROGRAM

CNRMA is currently undergoing EMS implementation. An Internal Assessment Plan (IAP) was developed and implemented for Craney Island, a large fuel terminal in Hampton Roads. The Craney Island IAP is currently used as a template for two additional CNRMA installations: Naval Amphibious Base, Little Creek and Naval Air Station, Oceana.

Based on the IAPs, routine assessments are held to review environmental compliance findings, corrective actions, and program goals. Findings are reviewed for root cause and problem solving. During the summer of CY03, a LANTFLT EMS Implementation contract was implemented to conduct significant environmental aspect inventory ranking and methodology. These EMS implementation efforts are underway.

Regional Environmental Group staff members maintain good relationships with local and state regulators and EPA Region III. Areas of concern identified in inspection reports and notices of violation are addressed and resolved promptly. Notices of violation receive high visibility; the flag officer at CNRMA is briefed regularly on any instances of noncompliance and associated corrective actions.

CNRMA comptroller and environmental staff rigidly adhere to Navy policy that environmental funds can only be spent on legally-mandated requirements. During FY03, the environmental budget was $12.9M, of which $6.3M went to salary and support, $2.9M to recurring requirements such as sampling and hazardous waste disposal, and $3.8M for one-time compliance requirements.

NATIONAL ENVIRONMENTAL POLICY ACT (NEPA)

Planning

The Regional Environmental Group works as a team with the CNRMA facilities planning staff, as well as Navy service providers, in ensuring NEPA compliance in the region. Currently, facility planners review project site approvals to determine if the project qualifies for a NEPA categorical exclusion (CATEX). If the project cannot be categorically excluded, the project is forwarded to the REG, who will initiate a detailed environmental analysis of for the project.

Under the Coastal Zone Management Act (CZMA), if a federal action has effect on the coastal resources of particular State, the federal action must be consistent with the state's coastal protection programs. The REG has been working with Virginia to develop a first-ever list of Federal Agency activities considered as de minimis activities, and therefore exempt from further review under the Federal Consistency Program. The de minimis activities, are activities that, when implemented under normal conditions will not have any adverse effect on Virginia's coastal resources. The list of activities was developed using the NEPA Categorical Exclusions of the Navy, Army and Air Force. Negotiations are ongoing and, when completed, will further streamline the Federal Consistency submittal process for all DoD activities in Virginia.

The Regional Environmental Group participated fully in the Atlantic Fleet's NEPA Process Improvement Team, initiating an issue paper to Commander Navy Installations (CNI) for delegating signature authority for Findings of No Significant Impact (FONSI) to the Regional Commander level. The Regional Environmental Group worked with CNI to draft and finalize an application form, used Navy-wide by CNI, to officially request delegation of FONSI signature authority.

Analysis

Over the last two years, the region has completed over 25 EAs and one EIS in support of various mission operations and facility improvement initiatives. Examples include:

- Introduction of new helicopter platforms
- Introduction of new F/A-18 aircraft to the region
- Changes to Naval Special Warfare Group training operations
- Various Antiterrorism/ Force protection projects
- Demolition of antiquated infrastructure as well as the construction of new pier facilities

Several of these issues generated significant public interest. Environmental staff worked with facilities planners, mission proponents, public affairs, and Installation Commanders to involve the public and respond to their concerns.

Implementation

The REG has devised an "Environmental Checklist" for facility planners that has greatly increased the ability to identify potential environmental issues and requirements. The Checklist requires "yes" or "no" answers to simple questions regarding the proposed action, which will advise the planner on other environmental issues, such as storm water, air, tanks, natural resources or hazardous waste. The checklist is then forwarded to the environmental staff for follow up. The net result is streamlining of the site approval process, which speeds completion of needed fleet support projects.

COMPLIANCE WITH EO 12898

Environmental justice is fully incorporated into environmental planning in Navy Region, Mid-Atlantic, and all projects are carefully examined to determine whether the potential exists to disproportionately affect disadvantaged, minority, or low-income communities.